

REMARKS

Applicant respectfully requests reconsideration of the present application in view of the foregoing requested amendments and in view of the reasons that follow. Applicant respectfully asserts that entry of the requested amendments do not raise new issues that would require further search or consideration and would place the application in condition for allowance. Alternatively, entry of the requested amendments would place the application in better form for consideration on appeal.

Claims 11, 16 and 17 stand finally rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,784,180 to Sakai et al. (hereinafter “Sakai”) in combination with U.S. Patent No. 5,550,638 to Ikeda. Claims 11 and 16 also stand finally rejected under 35 U.S.C. § 103(a) as being unpatentable over Sakai in view of Ikeda in further view of U.S. Patent No. 6,434,266 to Kanno et al. (hereinafter “Kanno”). Claims 12, 14 and 15 stand finally rejected under 35 U.S.C. § 103(a) as being unpatentable over Sakai in combination with Ikeda. Claim 13 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Sakai in view of Ikeda in further view of Kanno.

By this amendment, claim 17 has been canceled without prejudice to or disclaimer of the subject matter contained therein. Therefore any outstanding rejections with respect to this claim has been rendered moot. Claim 11 has been amended to correct a minor informality and claims 12-16 remain unchanged in the application.

This amendment adds, changes and/or deletes claims in this application. A detailed listing of all claims that are, or were, in the application, irrespective of whether the claim(s) remain under examination in the application, is presented, with an appropriate defined status identifier. After amending the claims as set forth above, claims 11-16 are now pending in this application for consideration.

Applicant respectfully submits that each of the pending claims is patentably distinguishable over the cited references as required by § 103. Applicant further submits that none of the cited references, whether considered alone or in combination, discloses Applicant’s claimed image reading method including the step of *storing a digital monochromatic signal and digital color signals that are output from the BK line sensor*

and the R, G and B line sensors as a black reference data with a light source turned off as required by independent claims 11, 12, 14 and 16 and including the step of *storing a digital monochromatic signal and digital color signals that are output from the BK line sensor and the R, G and B line sensors as a white reference data with a light source turned on* as required by independent claims 11, 12 and 16. By contrast, the cited references fail to disclose, teach or suggest these claimed features. Accordingly, independent claims 11, 12, 14 and 16 and claims dependent therefrom, are patentably distinguishable over the cited references. This distinction will be further described below.

THE CLAIMS DISTINGUISH OVER THE CITED REFERENCES

Each of the independent claims stands rejected as being unpatentable over the combination of Sakai and Ikeda or the combination of Sakai, Ikeda and Kanno. Applicant respectfully traverses the rejections of these claims, and submits that these claims are allowable for at least the following reasons.

Applicant relies on MPEP § 2143, which states that:

[t]o establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations.

It is respectfully submitted that at least the first and third criteria of MPEP § 2143 have not been met in the Office Action.

The Cited References Do Not Suggest All Claim Recitations

Even if the first requirement of MPEP § 2143 was satisfied in the Office Action (which it is not, as explained below), the cited references still do not meet the third requirement, which is that “the prior art reference (or references when combined) must teach or suggest all the claim limitations.”

Embodiments of the present invention relate to an image reading method. The image reading method according to independent claim 14 includes the step of preparing a four-line

CCD sensor comprising a BK line sensor and R, G and B line sensors. Independent claim 14 also includes the step of *storing a digital monochromatic signal and digital color signals that are output from the BK line sensor and the R, G and B line sensors as a black reference data with a light source turned off.*

Independent claim 16 is also directed to an image reading method including the same preparing and storing steps as independent claim 14 but also includes the step of *storing a digital monochromatic signal and digital color signals that are output from the BK line sensor and the R, G and B line sensors as a white reference data with a light source turned on.* Independent claims 11 and 12 which are narrower in scope than independent claim 16, each includes these claimed steps. With this arrangement, the time required for shading correction and realizing high efficiency and high speed of the image reading operation can be realized (*see*, Specification, Page 3, lines 12-15). Applicant respectfully submits that the cited references fail to disclose, teach or suggest these claimed steps.

Sakai is directed to an image memory apparatus. The Office Action correctly notes that Sakai fails to disclose the claimed step of preparing a four-line CCD sensor. The Office Action then relies on the Ikeda reference to cure this deficiency. Applicant respectfully disagrees. As a preliminary matter, Applicants respectfully submit that Sakai also fails to disclose, teach or suggest *storing a digital monochromatic signal and digital color signals that are output from the BK line sensor and the R, G and B line sensors as a black reference data with a light source turned off* as required by the claims. Column 1, lines 24-28 highlighted by the Examiner fails to disclose this feature. Not surprising since Sakai fails to disclose the claimed four-line CCD sensor with a BK line sensor and R, G, and B line sensors. In addition, the Sakai reference also fails to disclose, teach or suggest *storing digital monochromatic signal and digital color signals that are output from the BK line sensor and the R, G and B line sensors as a white reference data with a light source turned on* as required by independent claims 11, 12 and 16 for the same reason discussed above regarding the step of storing signals as black reference data.

The Ikeda and Kanno references were relied on for disclosing the steps of preparing the four line CCD sensor and executing a shading correction, respectfully. Applicant respectfully submits that neither Ikeda nor Kanno discloses *storing a digital monochromatic*

signal and digital color signals that are output from the BK line sensor and the R, G and B line sensors as a black reference data with a light source turned off and storing digital monochromatic signal and digital color signals that are output from the BK line sensor and the R, G and B line sensors as a white reference data with a light source turned on and were not cited for that purpose.

In view of the fact that neither the combination of Sakai and Ikeda nor the combination of Sakai, Ikeda and Kanno discloses each of the claimed steps identified above, these references cannot be said to render obvious the invention which is the subject matter of independent claims 11, 12, 14 and 16. Thus, independent claims 11, 12, 14 and 16 are allowable. Since independent claims 11, 12, 14 and 16 are allowable, claims dependent therefrom, namely claims 13 and 15 are also allowable by virtue of their direct or indirect dependence from allowable independent claims 11, 12, 14 and 16 and for containing other patentable features. Further remarks regarding the asserted relationship between any of the claims and the cited reference are not necessary in view of their allowability. Applicant's silence as to the Office Action's comments is not indicative of being in acquiescence to the stated grounds of rejection.

In sum, even if the first requirement of MPEP § 2143 is satisfied, the third requirement of MPEP § 2143 is not satisfied in the Office Action, since the cited references do not teach each and every element of the present invention. Thus, the present claims are allowable.

Lack of Suggestion or Motivation to Modify or Combine the References

The Supreme Court in the *KSR Int'l Co. v. Teleflex, Inc.*,” 127 S.Ct. 1727 (U.S. 2007), recently clarified the standards for obviousness. For example, the Court has stated that “a patent composed of several elements is not proved obvious merely by demonstrating that each of its elements was, independently, known in the art...it can be important to identify a reason that would have prompted a person of ordinary skill in the relevant field to combine the elements in the way the claimed new invention does.” *KSR* at 1741. In addition, the Court

in *KSR* stated that a reason to combine elements should be made explicit. *Id.* at 1740-41.¹ Indeed, the Court approvingly cited *In re Kahn*, 441 F.3d 977 (Fed. Cir. 2006), for requiring an articulated reason. *Id.* at 1741.²

Sakai is devoid of any reason why one of skill in the art would incorporate the teachings of either Ikeda or Kanno into Sakai. The Office Action, states that combining the references would “provide an image processing apparatus which can precisely reproduce an original” and “provide a color image processing apparatus and a color image processing method which makes it possible to suitably convert a color.” Thus, the proffered motivation, even assuming that the underlying results do in fact occur from general implementation of the teachings of Ikeda and Kanno, does not mean that the ordinary artisan would have incorporated the features of Ikeda and Kanno into Sakai.

Thus, the PTO has not properly articulated a reason for why one with ordinary skill in the art would combine the teachings of Ikeda, Kanno and Sakai. Because the PTO has not provided sufficient reasons to combine the teachings of Ikeda, Kanno and Sakai, any rejection based on this combination is improper. Accordingly, claims 11-16 are not rendered unpatentable over the prior art.

In summary, because of the lack of suggestion or motivation in the prior art to modify the reference, the first requirement of MPEP § 2143 has not been met and, hence, a *prima facie* case of obviousness has not been established.

Applicant respectfully submits that independent claims 11, 12, 14 and 16, and claims dependent therefrom are patentably distinguishable over the cited references and thus, allowable. Further remarks regarding the asserted relationship between any of the claims and the cited references are not necessary in view of their allowability. Applicant’s silence as to

¹ “Often, it will be necessary for a court to look to interrelated teachings of multiple patents; the effects of demands known to the design community or present in the marketplace; and the background knowledge possessed by a person having ordinary skill in the art, all in order to determine whether there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue. To facilitate review, this analysis should be made explicit.” *Id.* at 1740-41.

² “Rejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness” *Id.* at 1741.

the Office Action's comments is not indicative of being in acquiescence to the stated grounds of rejection.

CONCLUSION

Applicant believes that the present application is now in condition for allowance. Favorable reconsideration of the application as amended is respectfully requested.

The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 19-0741. Should no proper payment be enclosed herewith, as by a check or credit card payment form being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 19-0741. If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicant hereby petitions for such extension under 37 C.F.R. §1.136 and authorizes payment of any such extensions fees to Deposit Account No. 19-0741.

Respectfully submitted,

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